

IN THE CLAIMS

1. (Currently Amended) An integrated circuit die comprising:
a copper contact, wherein the copper contact is a wire bond pad;
a coating on the copper contact, the coating including a material formed from a reaction
of an organic material with copper oxide.
2. (Original) The integrated circuit die of claim 1 wherein the coating is formed by
exposing the copper contact to a solution that includes the organic material.
3. (Original) The integrated circuit of claim 2 wherein the solution has a pH level of
at least 7.
4. (Original) The integrated circuit of claim 3 wherein the solution has a pH level of
at least 7.5.
5. (Original) The integrated circuit of claim 1 wherein the organic material includes
molecules having nitrogen-hydrogen bonds.
6. (Original) The integrated circuit of claim 1 wherein the organic material includes
benzotriazole.
7. (Original) The integrated circuit of claim 1 wherein the organic material includes
at least one of tolyltriazole, imidazoles, benzoimidazoles, polyaniline, and polyimidazoles.
8. (Original) The integrated circuit die of claim 1 further comprising:
a plurality of interconnect layers including a final copper interconnect layer;
an insulating layer overlying the interconnect layers;
wherein the copper contact is located in the final copper layer and is accessible by an
opening in the insulating layer.

9. (Original) The integrated circuit die of claim 8 wherein the coating is located in the opening in the insulating layer.

10. (Canceled)

11. (Original) The integrated circuit of claim 1 wherein the coating has a thermal resistance of 100 C or greater.

12. (Original) The integrated circuit of claim 1 wherein the coating has a thickness of 150 Angstrom or less.

13. (Original) The integrated circuit of claim 1 wherein the coating has a thickness in the range of 20-50 Angstroms.

14. (Original) The integrated circuit of claim 1 wherein the coating has a thickness of 50 Angstroms or less.

15. (Original) An integrated circuit package including the integrated circuit die of claim 1 and further comprising:

a package substrate, the integrated circuit die attached to the packaged substrate;
a wire connected to the copper contact and connected to a contact of the package substrate.

16-38. Canceled

39. (Original) An integrated circuit die comprising:

a plurality of copper bond pads;

a coating on each of the plurality of copper bond pads, the coating formed from exposing the copper bond pads to a solution that includes an organic material, the organic material includes molecules having nitrogen hydrogen bonds, the coating includes a material formed from a reaction of the organic material with copper oxide, the coating has a thickness of 150 angstroms or less.